

20th International Workshop on Laser Ranging Clinic Session 7: Procedures and Responsibilities of Stations and Missions Horst Muller, Carey Noll, Christian Schwatke, Kate Stevenson 11 October 2016

Topic 1: Record Keeping for Station Changes

A "change" could be any number of things – for example, a major upgrade that takes the station offline, a nearby earthquake, or a new aircraft detection method. When a change occurs, there are three different places that records may need to be updated. If a change affects the data gathered by the station, a quarantine period may be necessary.

Three methods of tracking station changes:

- 1) CRD Configuration Records http://ilrs.gsfc.nasa.gov/docs/2009/crd_v1.01.pdf
- 2) Site Log

ftp://cddis.gsfc.nasa.gov/reports/slrlog

3) Change History Log

ftp://cddis.gsfc.nasa.gov/reports/slrlog/slrhst/

Updates to these three items should be made as soon as the change has been implemented. Updates to the CRD configuration records must be made BEFORE the new data are sent.

When updating Site Logs and Change History Logs, please use the ILRS website link listed above to retrieve your existing files. These files contain any fixes for typos made to allow automated parsing programs to use them.

Topic 2: Station Quarantine

Whenever a station makes a "significant" change to the hardware or software in their system's measurement path, the station must work with the ILRS to insure that the quality of the data has not suffered and that there have been no unexpected biases or systematic effects introduced into the data produced after the changes have gone into effect. The ILRS has instituted a data quarantine policy in order to ensure that only data of the highest quality are available to the user community. The instances when a station's data can be quarantined are as follows:

- if a station is new, joining the network for the first time;
- if a station has carried out major upgrades to hardware and/or software;
- if a station requests that the data be put into guarantine;
- if a station has not delivered any data for over 90 days.

If you are making major station changes, please alert the ILRS CB ahead of the work. If you have questions about whether your station needs to be quarantined, please contact the ILRS CB: ilrs-cb@lists.nasa.gov



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Frequently Asked Questions

Q: What kinds of documentation is my station responsible for?

A: Site Log, Site History Log, Configuration Records in CRD

Q: When should my station update its Site Logs?

A: Whenever a change is made in the signal path components or the data processing software.

Q: How can my station update its Site Logs?

A: Copy the current version from ftp://cddis.gsfc.nasa.gov/reports/slrlog and update that. Then submit the updated Site Log to the ILRS Central Bureau: ilrs-cb@lists.nasa.gov

Q: Why are Site Logs important? How do they help with SLR?

A: Site Logs are the only source of information that the SLR analysts have about the station equipment. If the Site Logs are out of date, then the analysts do their work with the wrong values, which leads to poor analysis, for example, bias estimates may be off.

Q: When should my station alert the CB of changes?

A: Whenever a change is made that could affect the data. Please alert the ILRS CB as soon as you know that changes must be made. If you are in doubt, please contact the CB.

Q: How does my station get released from quarantine?

A: The station must track Lageos (L1, L2, or both) for 20 passes within a 60-day window. The Analysis Standing Committee will analyze the data and if it is acceptable, the station will be released from quarantine.